

Immediate Circumcision of the Newborn

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Reprinted from Vol. 7, No. 1, January, 1956

OBSTETRICS
and GYNECOLOGY

Published by PAUL B. HOEBER, INC.
MEDICAL BOOK DEPARTMENT OF HARPER & BROTHERS

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Printed in the U.S.A.

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DURING RECENT YEARS decreased hospital stay on the part of the patient and increased hospital charges have led us to the circumcision of infants immediately after delivery. The advantages to be gained from performing this procedure without delay are many and varied.

Benefits to Infant

Work done by Grossman and associates² indicates that the clotting time during the first 6 hours of life averages about 14 minutes. During the succeeding few days it is prolonged. Prothrombin concentration was found to be uniformly high on the first day,¹ followed by a fall persisting until the third day. These and other⁴ studies suggest that early circumcision obviates much of the danger from hemorrhage.

Advantages to Physician and Hospital

A multifold advantage inherent in immediate circumcision is the saving of man-hours: It does away with the necessity of scheduling circumcision to avoid feeding times. There is no need for personnel to transport the infant to the circumcision or operating room. No time is spent in preparing a room or special sterile pack. The infant's skin requires no preparation. The surgeon is already scrubbed. The instruments required are already present in the delivery set-up. An assistant is at hand.

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Other advantages from an administrative point of view are pointed out by Moeller and Moss in reporting their experience with 2400 newborns circumcised in the delivery room.

METHOD

We have found the ring type of circumcision device to be most satisfactory. It requires no extra equipment, it is fast and economical, and requires no dressing or special care after surgery. In the first 200 of a series of approximately 800 circumcisions we used the Ross Circumcision Ring. The small size of this ring meant that it was easily lost and its high cost meant a considerable financial loss over the course of a year. Being made of metal, it could not be adapted to variations in size or shape of the glans or prepuce. This occasionally resulted in undue tension on and tearing of ventral vessels, with resulting hemorrhage which was difficult to control. Its rigid handle, by projecting beyond the glans and being in contact with the diaper, caused pressure on the coronal sulcus and ventral vessels. This at times caused delayed hemorrhage.

Because of these problems a study was made of the design of the device and of plastic casting material and methods. This led to the production of a disposable butyrate bell with removable handle (Fig. 1).^{*} This was used in approximately the last 600 cases of this series. It is used in much the

^{*} Distributed by Plastibells, 1577 South Ave., Rochester 20, N. Y.

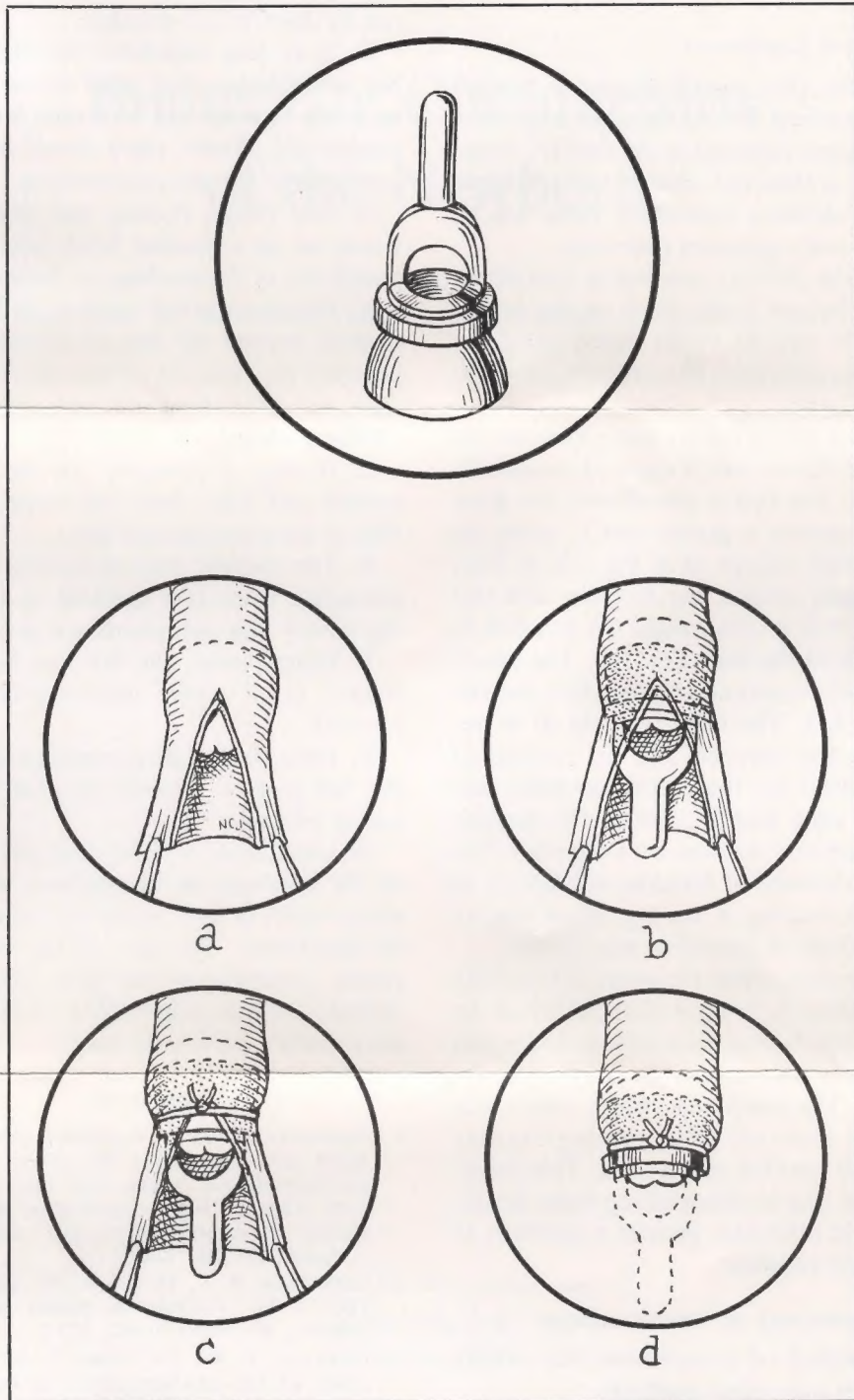


Fig. 1. Plastic device used in approximately 600 circumcisions. *a*, *b*, *c*, and *d* show major steps in the operation.

same manner as other devices of this type, which in substance is as follows:

Technic and Equipment

The bells, plus several lengths of braided silk or unwaxed fishing line, are kept in a jar of aqueous Zephiran in the delivery room. Forceps, 2 Halstead clamps, and scissors from the delivery instrument table are all the additional equipment necessary.

When the delivery routine is completed, the baby is held on its back on the instrument table with its thighs flexed along the sides of the abdomen. No scrubbing or draping is necessary.

A dorsal slit is made, the adhesions are freed, and the corona is exposed completely (Fig. 1a). The bell is placed over the glans and the foreskin is drawn over it, using the two Halstead clamps as in Fig. 1b. A linen tie is placed around the foreskin and tied firmly so that it compresses the foreskin in the groove of the bell (Fig. 1c). The excess foreskin is cut away and the handle is broken off (Fig. 1d). The baby is ready to be returned to the bassinet, and the amount of time involved for the entire procedure has been not more than 3 minutes. No dressing is necessary and no after-care required. The ring and remnant of foreskin will fall off in 5-7 days, leaving a healed, clean line of excision, free of excessive scar tissue.

On occasion, when the penis is unusually small or there is a minor abnormality of the foreskin, the bell portion of the device can be trimmed with scissors to the proper size or shape. The sharp edge which results can be quickly smoothed off by rubbing it briskly on a sterile towel or drape sheet. This makes for greater ease in circumcising those infants who would otherwise present a problem of one sort or another.

SUPERIORITY OF PRESENT METHOD

This method of circumcision has several advantages over other methods:

1. It is less time consuming. Being done, as it is, at the time of delivery, the obstetrician's hands are already scrubbed, the penis is as sterile as it will ever be, the instruments

and table are clean and immediately available. *From beginning to end the procedure can be done in 2-3 minutes.*

2. It is less expensive for the patient. No circumcision tray need be set up, and no nurse is necessary at a time later in the puerperium. *Hence, there should be no hospital charge for the circumcision.*

3. The baby's clotting and prothrombin times are at a normal level, and thus *the possibility of hemorrhage is minimized.*

4. Because the bell portion of the device extends beyond the line of circumcision, *it prevents the removal of too much foreskin, such as often happens with the Gomco (Yellen) clamp.*

5. *Healing is complete by the time the mother and baby leave the hospital on the fifth or sixth postpartum day.*

6. *The method may be used as an office procedure when it is desirable of circumcising a baby that was premature at birth.*

7. *Being plastic, the bell can be cut and shaped to fit minor abnormalities of the foreskin.*

8. *Since the handle is removed, no part of the bell projects beyond the glans to cause undue pressure.*

In conclusion, we feel that circumcision of the newborn in the delivery room has many merits in both safety and conservation of man-hours. The use of the disposable plastic circumcision bell gives added convenience, speed, adaptability, and economy over devices previously used.

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